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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,966	12/23/2003	Patrick Willem	920522-95347	9399
23644 7590 10/18/2007 BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786			EXAMINER DINH, DUC Q	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 10/18/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent-ch@btlaw.com

Office Action Summary	Application No. 10/743,966	Applicant(s) WILLEM ET AL.	
	Examiner DUC Q. DINH	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/25/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11,22 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-4 recites the limitation "the image upscaling or downscaling" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. The term "suitable for performing calculations/image upscaling" in claim 1 and 24 is a relative term which renders the claim indefinite. The term "suitable for performing" is not defined by the claims, one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7, 9-11, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cok (U.S Patent No. 6,999,045) in view of Matthies (U.S Patent No. 6,498,592)

In reference to claim 1, Cok discloses in Figure 1, a tiled emissive display (8) for displaying an image, the tiled emissive display (8) comprising a plurality of emissive display tile assemblies (10) mechanically coupled together, and

a processing means (32 in Fig. 4) for performing real-time calculations with respect to the image to be displayed, wherein the processing means is a distributed processing means distributed over the plurality of emissive display tile assemblies (10), so that each emissive display tile assembly (10) is suitable for handling a different portion of the image for performing real-time calculations for the light output. Accordingly, Cok discloses everything except the processing suitable for calculations for the various pixels of the correspondent display tile assembly in relation with the ON time, light output and the lifetime correction of these pixels. Matthies discloses the tiled emissive display (Fig. 1) wherein the distributed processing means (Fig. 2) for performing calculations for the various pixels of the correspondent display tile assembly in relation with the on time, light output and the lifetime correction of these pixels (col. 9, lines 7-11 and col. 10, lines 40-60).

It would have been obvious for one of ordinary skill in the art at the time of the invention to learn the teaching of Matthies in the device of Cok because it would provide a large tiled display in which brightness and gray scale of the display do not degrade with increasing size (col. 8, lines 10-15)

In reference to claim 3, Cok discloses for the image upscaling or downscaling a high-level scaling algorithm is used (col. 4, lines 28-43).

In reference to claim 4, Cok discloses wherein the high-level scaling algorithm is a 100% accurate scaling algorithm (col. 4, lines 6-18).

In reference to claim 5, Ogino discloses the distributed processing means of the plurality of emissive display tile assemblies (10) operate in parallel (see Fig. 5).

In reference to claim 6, Cok discloses an emissive display tile assembly (10) is provided with a data input and/or a data output connection for receiving data from or transmitting data to another emissive display tile assembly (10) via any of a multi-line connection (see Figs. 1 and 4).

In reference to claim 9, Cok discloses in each emissive display tile assembly (10) is provided with a local memory means (36 in Fig. 4) for storing configuration data (col. 3, lines 10-15).

In reference to claim 10, Cok discloses a tile is adapted so that it can be repaired while other tiles continues working (col. 4, lines 50-60)

In reference to claim 11, Cok discloses the display has an adjustable size (col. 2, lines 40-41 and col. 4, lines 48-49).

In reference to claim 22, Cok discloses the display is an OLED display (col. 5, lines 50-55).

In reference to claim 24, Cok discloses the processor is suitable for performing image upscaling or downscaling at each emissive display tile assembly (10) [col. 3, 38-43; col. 4 lines 34-47].

In reference to claim 8, Cok discloses an improved design for providing data signals to a tiled display that is expansible, readily scales to larger size tile arrays, does not require a single common hardware connection device and can be self-configured, is provided through the use of *a serial electronic connection* from one display tile to the next and originating from a single controller. Each display tile is connected to two neighbors and communicates with each

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neighbor. A display tile at the end of the series of display tiles will only communicate with the single neighbor to which it is connected (col. 2, lines 42-50). But Cok does not specifically that a connector allowing to combine both power and data transmission.

It would have been obvious for one of ordinary skill in the art at the time of the invention to recognize the use of connector allowing to combine both power and data transmission is well known to provide compact system in the art of display are widely used for reducing the size of the system.

Furthermore, absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to combine the power and data transmission as a connector for display system as desired as was judicially recognized with *In re Larson*, 144 USPQ 347 (CCPA 1965), which recognizes that the combination of well known elements i.e. power and data, is normally not desired toward patentable subject matter.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cok and Matthies in view of Ogino et al. (U.S Patent No. 6,791,513).

In reference to claim 7, Cok discloses is provided through the use of *a serial electronic connection* from one display tile to the next and originating from a single controller and Ogino discloses an emissive display tile assembly (100) is provided with a power input and/or a power output connection for receiving power from or transmitting power to another emissive display tile assembly (100) via any of a multi-line connection (106) in Figs. 1, 2, 3, 7 and 12 as claimed.

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It would have been obvious for one of ordinary skill in the art at the time of the invention to utilized the power connection as taught by Ogino in the display device of Cok so that a user can freely and easily change a size of the screen (col. 3, lines 2-3).

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3-11, 22 and 24 have been considered but are moot in view of the new ground(s) of rejection.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

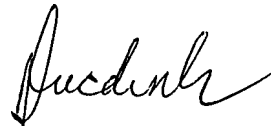
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE can be reached on (571)272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DUC Q DINH
Primary Examiner
Art Unit 2629